
 DEPARTMENT OF THE ARMY LRL-01420 (March 1999)
 U.S. ARMY CORPS OF ENGINEERS
 GUIDE SPECIFICATION FOR MILITARY CONSTRUCTION

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09/97

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 DEPARTMENT OF THE ARMY LRL-01420 (March 1999)
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 GUIDE SPECIFICATION FOR MILITARY CONSTRUCTION

SECTION 01420

SOURCES FOR METRIC PRODUCTS
 09/97

 NOTE: This guide specification provides a listing
 of firms that can fabricate or install metric
 products. This guide specification is to be used in
 the preparation of project specifications in
 accordance with ER 1110-345-720.

PART 1 GENERAL

Manufacturere listed are for information only and are not intended to limit
 selections from other manufacturers producing metric products.

1.1 REFERENCES

 NOTE: See Additional Note A.

1.1.1 Access Floor

Following firms make access floor.

Interface AR	R.A. Coffey, Cinci, OH
Don Heeney	Tom Bougie
616-243-2211	513-631-1711

Tate Access Floors MD
 Bill Reinolds
 410-799-4200

USG Interiors/Donn IL
 Chuck Capperine
 312-606-4190

Interface GA
 Only size is 500 x 500 intended for wire management applications.

Lew Engle, Peter LePage
 800-336-0225

1.1.2 Air Diffusers and Grilles

Acutherm CA

Manufacturer of VAV air distribution devices, can make metric sizes.

Caroline

510-785-0510

Aireguide FL

A large air products mfr, can make 80-90% of its products in metric sizes.

Daryl Gray

305-888-1631

Carnes WI

A large mfr, often makes metric sizes.

Dick Laughlin

608-845-6411

Donco Air Products IA

Can make light troffer, slot, and lay-in diffusers up to 1500 mm long.

Ron Jansen/Marc Vanedgrift

515-488-2211

Duralast LA

Ron Vinson (distributor)

504-837-2346

J & J Register TX

Can make hard sizes.

Paul Dana

915-852-9111

Juniper Industries NY

Has made, and can make metric size diffusers and grilles.

Steve Liebermann

718-326-2546

Krueger, Ind. AZ

Can make metric sizes.

Steve Bowser

972-918-8894

Rock Island Register IL

Can make its diffuser in 600 x 600.

John Howarth

309-788-5611

Thermo Kinetics SC

Can make metric grilles and diffusers. No extra cost.

Terry Rutledge
800-268-0697

Titus Products TX
Major mfr. of grilles and diffuser products, indicates a number of products
now available in metric sizes.

John Frank
972-699-1030

1.1.3 Anchor Bolts

These firms can provide metric anchor bolts, threaded rod, and similar material.

AI Nut & Bolt
Victor Villegas
800-5423-4287

Archer-Engineering IL
Ron Lanie
773-247-3501
No minimum quantity.

Atwood Industries OH
Jeff Mueller, James Mraz
800-362-2059
No minimum order. Premium on smaller quantities.

Fansteel Mfg. LA
Dick Humston
800-394-7091
Lists metric threads can be obtained on their anchor bolt products.

High Point Fasteners NJ
Ted Brace
201-293-3411
No minimum quantity.

Hilti OK
Dick Wollmenshauzser
800-879-6000
Offers their HSL metric expansion anchors in M8, M10, M12, M16, M20, and M24.

Kenneth Lilly Fasteners DE
Gary Lilly, Roland Sharp
800-433-1815
No minimum quantity.

Midstate Bolt and Screw MI
Herb Sommers, Kevin Bloss
800-482-0867

No minimum quantity.

O'Brien Iron Works CA
Richard Schulba, Richard Kotalik
510-685-5300

No minimum quantity.

Piping Technology TX
Marion McKnight, Aundrela Durham
713-731-0030
required minimum order

Richmond Screw Anchor TX
Leroy Caldwell
800-989-2700
No minimum order, premium on orders of 100 bolts or less.

Steel Products/Massillon HO
Mike Friel
800-874-2658
Minimum \$50.00 order.

Wayne Bolt MI
Joe or Mike Wojcik
800-521-2207
No minimum quantity

1.1.4 Block/CMU

Many firms can supply hard metric block.

Betco Block
Is supplying metric block to GSA. Minimum order is 150 m2.

Betco Block MD, Scott Harper, 800-486-2312
Betco Block PA, Steve Nagel, 800-300-6155
Betco Block VA, Robert Carmody, 800-486-4011

Capital Industries, MI
manufacturers for Burns and Russell MD
Dick Collins
810-828-3083

Clarkes Block GA
L. E. Wells
912-234-3436

Colorado Concrete Mfg. CO
Karl Dolder, Thor Kaumeyer
719-390-5477
Paving Stone

Dagostino Building Blocks NY
Ed Carey, Jeff Orvis

518-374-3116

Featherlight Building Products TX
Wade Albritton, H. V. Moss
512-472-2424
Can produce metric block

Grand Blanc Cement MI
Michael Hicks, Ron Hunt
800-875-7500
Can supply metric molds, all shapes.

E. P. Henry NJ
Stephen Reale, Mariane Anzaldo
609-845-6200
Paving Stones

Jewell Concrete Products TX
Walter Grisham
817-772-3440
Steve Bickerdike
903-592-0752
Can make metric block.

Superlite Block AZ
Mark Yablowski
520-744-3500
Several hundred block orders acceptable.

Trenwyth Industries PA
Bill Witheron
800-233-1924
Makes many metric block sizes.

Tricon Enterprises MA
Reiner Kuntz
508-697-6112
Paving Blocks

1.1.5 Block/Glass

Pittsburgh Corning PA
Robert McMarlin
412-327-6100
Makes metric glass block. Several patterns. 190 X 190 mm (80 or 100 mm thick)

1.1.6 Carpet

Interface GA
Scott Landa, Kathy Kerby
800-336-0225
Carpet Tiles. No minimum, but premiums on orders from 1 to 100 m2 orders.

Shaw PA
Sara Jornson, 800-424-7429
Carpet Tiles.

1.1.7 Ceiling Systems

Armstrong World Industries PA
Tim Traber
717-396-6207
Usually no added cost or lead time for metric sizes.

Celotex Corporation FL
Debbie Morales
813-873-4027
A major tile Mfr, offers an entire product line of hard metric sizes.

Chicago Metallic Corp. IL
Doug Evak
800-323-7164
Makes Metric grids.

National Rolling Mills PA
Rich Mattioni
610-644-6700
Steel Ceilings OH
Lou Heil
614-622-4655
Can make metric perforated and unperforated accoustical metal ceiling panels in steel, aluminum, and stainless.

USG Interiors IL
David Vanosdall
312-606-3804

1.1.8 Conductors

These firms either have made metric conductors before, or are able to make them.

Americable AR
Noubar Sarkissian
800-643-1516
Produces mm2 sizes, and can supply for US projects, (sizes 0.5 to 300 mm2)

American Flexible Conduit MA
Mary Lou Newell
800-225-8588
Has made metric before, can produce mm2 sizes.

Pacific Electricord CA
Beverlly Kokis
310-532-6600
Stocks some 0.75, 1, and 1.5 mm2 product. Can produce other sizes.

Pirelli Cable NJ
Joe Anderson
800-845-8507
Has made mm2 sizes, and produce.

Rome Cable NY
Jan Visser
315-337-3000
Has made mm2 sizes, can produce.

1.1.9 Curtainwalls

These are obtainable in hard metric. This means panel length and width can be any size. Panel extrusions may be hard to change, and may need to be specified in soft metric.

Howard Industries, FL
Bob Voigt or Joe Sixto
815-889-4105
A major windowall mfr, has done foreign work, can make metric sizes.

Kalwell Corporation NH
Bruce Keller
800-258-9777
A major curtainwall producer, can make hard metric sizes.

Kawneer Company GA
Edward Bugg, Asst. Engrg Mgr, 540-433-2711
A major manufacturer, has been making metric for overseas for years, and can make any metric size.

1.1.10 Doors/ Metal

Acme Steel Door NY
Joseph Licari
718-384-7800

American Steel Products NY
Hank Repperger
516-293-7100
Can make any size metric door.

Anweld Building Products, OH
Fred Bloom, Jr.
800-248-6116
Has made metric before, can make metric sizes.

Ceco Door IN + TN
Emil Kostel
615-661-5030
A major mfr, can make any hard metric size.

Dual Lock OR

Rick Carlton
800-678-0566
Major aluminum products, mfr, can make any metric size.

1.1.11 Doors/Wood

Many other door manufacturers indicated ability to supply metric doors but did not respond with detailed information prior to publication.

Eagle Plywood and Door Mfr NJ
Tony Schifano
908-769-7650
No minimum

Marlite OH
Donald Sweitzer
330-343-6621
Can produce.

Mohawk Flush Doors PA
Don Enigk
717-473-3557
No minimum.

Vancouver Door WA
Gary Geppert
206-845-9581

1.1.12 Gypsum Board

Celotex FL
Christa
813-873-4027

Georgia Pacific GA
Mohomid Ali, Mel Happel
800-225-6119

National Gypsum NC
Jim Allen
800-628-4662

Temple Inland TX
Jim Rush
800-231-6060

USG Interiors IL
Chuck Capperino
312-606-4190

1.1.13 Elevators

Dover TN
601-393-2110

Montgomery IL
309-764-6771

Otis Elevator SC
803-875-8000

Schindler NJ
201-984-9500

1.1.14 Floor Tile

Freudenberg MA
Mike Goulette
508-689-0530

Gerbert PA
Bill Neifert
717-299-5035

Roppe OH
800-537-9527

1.1.15 Lighting Fixtures

We recommend that selection of fixtures be limited to the high volume, commonly used lay-in fixtures, since industry is concerned that the effort associated with converting all products to metric over a short period of time would be difficult, as tooling requires resources and time to construct.

ALP Lighting IL
Don Michels
773-774-9550

Supplies louvers and lenses to many major US mfrs., can produce these products in any required metric size. ALP has supplied louvers to Germany and England in metric sizes.

American Fluorescent IL
Gary Stabelfeldt
847-249-5970

Can produce the 600 x 600 and 600 x 1200 fixtures. Electronic ballasts available. Parabolic and lensed available. Minimum order is about 500 fixtures.

Bieber Lighting Corporation CA
Bob Bieber, Ron Bieber
800-243-2375 213-776-4744

Can make both 600 x 600 and 600 x 1200 hard metric fixtures. 18 cell parabolics, electronic ballasts, are available.

C. W. Cole & Co. CA
Kevin Brummett
818-443-2473

Can make both 600 x 600 and 600 x 1200 hard metric light fixtures.
Parabolic and lensed. Electronic ballasts are available.

Day-O-Lite Manufacturing RI
Steve weisman

401-467-8232

Can produce the 600 x 600 and 600 x 1200 fixtures. Electronic ballasts
available, parabolic and lensed available. No minimum order quantity.

Hasco Electric Corp. CT
Brad Segona

203-531-9400

Can produce both the 600 x 600 and 600 x 1200 fixtures. Parabolic, lense
and electronic ballasts available. Minimum order is about 20 fixtures.

Holophane OH
Dennise Lohman

614-345-9631

Can provide the 600 x 600 and 600 x 1200 fixtures. Parabolic or lensed
available. Electronic ballasts available. Holophane has quoted hard
metric inquiries before. Minimum order is probably about 100 fixtures.

Lithonia GA
West Coast: Marcus Cone

818-965-0711

One of the largest US lay-in mfrs, produces hard metric fixtures in its SP,
SP(air), Paramax, and Optimax products.

Louisville Lamp Company KY
Mike Davidson

502-964-4094

Is able to supply both the 600 x 600 and 600 x 1200 fixture. Electronic
ballasts, parabolics, lensed fixtures available. No minimum quantity.

Lumispec PA
Eric Papougenis

215-228-3830

Can produce both 600 x 600 and 600 x 1200 hard metric fixtures. Parbolics,
lensed, and electronic ballasts available. Minimum order is about 30
fixtures.

Mark Lighting NJ
George Miller

800-526-6280

Has made metric fixtures before, can supply both the 600 x 600 and 600 x
1200. Minimum order is about 50 fixtures.

Morlite Equipment PA
Michele Lohder

814-774-9631

Solar Kinetics TX

972-556-2376

Is able to provide the 600 x 600 and 600 x 1200 fixtures. Electronic ballasts available.

USI/Columbia Lighting WA
Mark Johnson

509-924-7000

The second largest fluorescent fixture producer in the country, often produces hard metric sizes, can supply 600 x 600 and 600 x 1200, and can make almost any size metric fixture. Lead times would not normally exceed 8-10 weeks.

1.1.16 Lumber

Vanport Mfg. OR
Wayne Geist

503-663-4466

90% of production is in hard metric for Japanese and other export markets. Thicknesses 27-120 mm. Widths 45-360 mm.

1.1.17 Mechanical Equipment

Many major manufacturers of mechanical equipment already have metric literature on their products, are converting literature and product data to metric, or have committed to do so for US metric projects.

American Standard
Ansul Fire Protection
Aurora Pump
Baltimore Air Coil
Carrier Corporation
Central Sprinkler
Dunham-Bush
Hurst Boiler
ITT Bell Gossett
Lendis and Gyr Powers
Liebert, current catalog has metric
Loren Cook Company
Marley Cooling Tower
McQuay
Trane Company
York

1.1.18 Nuts

These firms can supply nuts for anchor bolts and common construction fasteners

Century AL
Lynda Oakley
205-772-7300

Can supply metric nuts. \$50 minimum order.

Coloc TX
Dick Ingram

903-848-8411

Can make up to M116 nuts. Many grades. \$50 minimum order.

Fasteners and Metal Products MA

Tom Hatzis

617-489-0414

Can supply metric nuts.

Midwest Bolt and Supply MO

George Nudler

816-842-7880

Can supply metric nuts. \$25 minimum.

North Texas Bolt & Nuts TX

John Ricard

972-647-0608

A distributor, can supply metric nuts

Quality Bolt LA

Pat McGrail

504-923-2607

Can provide orders in the \$200-300 range.

Sampson Industries AZ

Brian Saxton, Christine Gruice

602-581-80822

1.1.19 Plywood

Metric plywood can now be used for items like housing, barracks, sheathing or formwork applications.

Champion International FL

Carl Capps

800-874-3240

Makes metric sheet sizes and thicknesses. Metric available for underlayment, sheathing, and sanded products. Metric concrete form panels can be ordered Minimum order is 1 truckload.

Wood International OR

Larry Cleverley

503-297-4738

Can supply 50-100 piece orders.

Murphy Plywood OR

John Murphy, Mark Gryziec

503-459-3225

Can make metric plywood.

Potlatch WA

C. D. Whitney/Mac Ryerse

509-328-0930

Has exported metric, can make metric sizes.

Roseburg Forest Products OR
Dave Adams/Kevin Barry
541-679-3311

Makes 6-19 mm thick plywood, can make metric sheets. Makes other metric wood building products. Minimum order is 1 truckload.

Stone Forest Industries, OR
Lain Osborn, Tom Clow
800-541-6906

Currently produces both metric dimensional and thickness plywood. This firm could produce about two pressloads minimum order (about 60 sheets) but premiums would apply to small orders of this size.

1.1.20 Rebar

Birmingham Steel AL
Chuck James

Stocks rebar in 10-35 mm. Minimum order is about 20 Mg, or one truckload, which can consist of different sizes, and can be shipped anywhere in the country. Facility ships rebar overseas regularly.

Cascade Steel OR
Glen Peterson
503-472-4181 x 3307

Currently makes 10-35 mm. 45 and 55 mm might require some lead time. When sizes are in stock, minimum order is about 20 Mg, or one truckload, which can be mixed sizes.

Florida Steel FL
Don Ballard, Don Haney
813-251-8811

Can produce A615M bar. Has production in FL, NC, and TN.

Marion Steel OH
Gerry Lehrke, Michael Johnson
614-383-4011

Can make A615M but is not able to make 45 and 55 mm.

New Jersey Steel NJ
Gary Giovannetti, Elaine Skiba
908-721-6600

Nucor Steel UT
R. Wayne Jones
801-458-2300

Can make A615M rebar 400/500 ton minimum order.

1.1.21 Steel Plate

Metric steel plate is available from US mfrs, and is being specified in hard metric on our projects.

Most firms indicated metric plate is usually not stocked, and would require some additional lead time. Many of these firms could also be consulted for

hard metric sheet metal purchase.

Many firms indicated, however, that no order would be too small to supply such as an order for 5 or 10 base plates. However, premiums would apply to smaller orders. Many grades can be supplied.

Many of the firms also fabricate. We can provide data on what standard sizes of plate are being specified government projects.

Sample firms that stock thickness plate/ or are able to supply or produce it:

Accro-Met NC
Andrea Montano
800-543-4755
Can supply in 6-150 mm.

Excel Bridge Mfg. CA
Craig Vasquez
562-944-0701
Can obtain steel plate and fabricate products in any metric dimension.

Leeco Steel Products IL
Mark Dickman
800-621-4366
Stocks some A572M metric plate. Can supply size/thickness in A572M or other grades.

Metalmart CA
Jed
800-888-7766
Has supplied metric plate. Stocks some, can supply many other thickness

United States Steel Can provide a chart showing their standard metric plate thicknesses (6-160 mm). They indicate their mill prices are generally the same as their prices for equivalent English sizes.

1.1.22 Structural Bolts

Many firms can produce A325M/M164M, and A490M/M253M bolts. Some can make ASTM A394M, galvanized metric transmission tower bolts.

Metric bolts may now be utilized on all projects. Some firms indicated they could supply metric bolts at small quantities, but premiums primarily related to set up costs, would be associated.

Atwood Industries OH
James Mraz
800-362-2059

Can supply A325M and A490M, as well as other metric bolts.

Bennett Bolt Works NY
 Ron Merrill NY, 315-689-3981
 Vince Ruggerio OH, 216-979-9813

Detroit Heading MI
 Roger Palmer, Kevin Stanisz
 313-925-8138
 Can also make A394M.

Haydon Bolts PA
 Richard Guisti
 215-537-8700

Holo-Chrome CT
 Skip Gallo

Huck Int'l TX
 Larry Chipman, Chuck Schultz
 800-388-4825
 Makes A325M and A490M product.

Kenneth Lilly Fasteners DE
 Gary Lilly, Roland Sharp
 800-433-1818
 Can supply A325M and A490M.

Lake Erie Screw OH
 Steve Vass
 216-521-1800

Metric and Multistandard Components NY
 Craig Worster
 800-431-2792
 Can supply A325M and A490M bolts. Also supplies other metric bolts.

Mid-West Fabricating OH
 Vaughn Doss
 614-969-4411

National Bolt NY
 M. D. Strauss
 800-992-6587
 Minimum order is 500 bolts.

Nucor Fastener Div IN
 Jim Witucky
 800-955-6826
 Minimum order is one keg per size.

Ohio Rod Products IN
 Jay Whitehead
 812-689-6565

AI Nut & Bolt CA
 Luke Sullivan
 800-423-4287
 Is able to make metric bolts.

United Steel and Fasteners IL
 Perri Guerino, Bob Fiorio
 630-250-0900
 No minimum quantity. Premium on smaller orders.

Wayne Bolt MI
 Joe or Mike Wojcik
 800-521-2207
 No minimum quantity.

1.1.23 Tools

Metric tape measures are available.

Some construction firms are using metric only tapes.

Federal agencies can buy 10 ft/3.3 m tape measures on GSA schedule.
 Product # 5210-00-4988, under \$5.

Lufkin Tools NC
 919-362-7511
 Makes metric tape measures.

Stanley Tools FL
 312-286-7330
 Makes metric measures
 32-156 (5 m) 32-158 (5m/16')
 33-443 (10 m) 33-428 (7.5 m/25')
 Carl Lickwar, Alan G. Martin 203-225-5111

Metric framing squares have also been ordered from Stanley by the US Public Health Service.

Stanley Hand Tools CT
 800-262-2161

US Tape VA
 W. S. Spotswood
 703-256-1500
 Makes metric tape measures, steel tapes, and derrick tapes.

Scales. Metric scales are available:

Staedtler-Mars Model 987-18-1
 Alvin Model 117 PM Charvoz Model 30-1261

Contact your local graphic arts supply store to order.

1.1.24 Windows

Alenco Commercial Group TX
Ed Lund

409-823-6557

Andersen Windows Commercial Group MN
Craig Johnson

612-439-5150

Modu-Line Windows WI
Mike Capo

715-842-9110

Marvin Windows MN
John Schrack

800-821-8390

218-386-1430

Pella Windows IA
Cheryl Waits

515-628-1000

Can make any metric size.

PART 2 NOT USED

PART 3 NOT USED

-- End of Section --

-- End of Section --